

INTERNATIONAL SEARCH REPORT

PCT/US2004/043930

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/52 A61K38/19 A61P31/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/055019 A (WASHINGTON UNIVERSITY; HOLTZMAN, MICHAEL, J) 18 July 2002 (2002-07-18)	1-10, 15, 18, 19, 21-24, 46-49
Y	whole document esp. pages 1-4, 6-7, 11, claims	11, 12, 16, 19, 22, 28, 35
X	WO 00/27880 A (FONDAZIONE CENTRO SAN RAFFAELE DEL MONTE TABOR; PRIMM S.R.L; LUSSO, PA) 18 May 2000 (2000-05-18)	25-28, 30-35, 39-45
Y	whole document esp. pages 2, 3, 5, 10 (Sequences 5, 6, 7), page 11 (sequences 16 and 19) and claims 9, 11	1-12, 15-19, 21-24, 36-38
	-/-	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

28 June 2005

Date of mailing of the international search report

04/08/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/51705 A (FONDAZIONE CENTRO SAN RAFFAELE DEL MONTE TABOR; LUSSO, PAOLO) 19 November 1998 (1998-11-19)	25-28, 30-34
Y	whole document esp. 1,3,4, 6 (sequences 1-3), claims 1,8,13	1-15,18
X	NARDESE V ET AL: "STRUCTURAL DETERMINANTS OF CCR5 RECOGNITION AND HIV-1 BLOCKADE IN RANTES" NATURE STRUCTURAL BIOLOGY, NEW YORK, NY, US, vol. 8, no. 7, July 2001 (2001-07), pages 611-615, XP008032504 ISSN: 1072-8368	25-27, 30-32, 39-45
Y	whole document esp. pages 611,614	1-24, 33-38
X	WO 99/62535 A (UNIVERSITY OF MARYLAND BIOTECHNOLOGY INSTITUTE) 9 December 1999 (1999-12-09)	1-10,15, 18, 21-24, 36-38, 46,47
Y	whole document esp. pages 9,12,17,45 claims 1,4,35,36,42	11,12, 16,19, 25-27, 30-34
X	US 2003/148947 A1 (RUBEN STEVEN M ET AL) 7. August 2003 (2003-08-07)	1-11,15, 18,19, 21-24, 46,47
Y	whole document esp. pages 49 '0445!', 94 '0897!', 98f, abstract	12-14, 20, 25-28, 30-34, 36-38
Y	WARRIOR U ET AL: "Identification and characterization of novel antagonists of the CCR3 receptor" J BIOMOL SCREEN, vol. 8, no. 3, 2003, pages 324-331, XP009049794 2003 whole document esp. page 329	20

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DEEPIKA R PAKIANATHAN ET AL: "Distinct but overlapping epitopes for the interaction of a CC-Chemokine with CCR1, CCR3, and CCR5" BIOCHEMISTRY, AMERICAN CHEMICAL SOCIETY. EASTON, PA, US, vol. 36, 12 August 1997 (1997-08-12), pages 9642-9648, XP002106002 ISSN: 0006-2960 the whole document	1-49
P,X	ELLIOT MB ET AL: "Inhibition of respiratory syncytial virus infection with the CC chemokine RANTES(CCL5)" J MED VIROL, vol. 73, no. 2, 2004, pages 300-308, XP002333029 2004 the whole document	1-49

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: -

Present claims 25-27, 30-36, 39-41, and 47-49 relate to an extremely large number of possible compounds defined by reference to the result to be achieved, namely the inhibition of infection by a virus of the family paramyxoviridae and/or "binding a CCR1/3/5 receptor". Support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds disclosed in the application (sequences 1-21 and molecules as characterized in formula I, II, and III).

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 02055019	A	18-07-2002	EP	1349566 A2	08-10-2003
			WO	02055019 A2	18-07-2002
WO 0027880	A	18-05-2000	IT	MI982441 A1	11-05-2000
			AU	2660400 A	29-05-2000
			CA	2348308 A1	18-05-2000
			WO	0027880 A2	18-05-2000
			EP	1131352 A2	12-09-2001
			JP	2003500334 T	07-01-2003
			US	6709649 B1	23-03-2004
WO 9851705	A	19-11-1998	IT	MI971105 A1	12-11-1998
			AU	8016398 A	08-12-1998
			WO	9851705 A1	19-11-1998
WO 9962535	A	09-12-1999	AU	4325499 A	20-12-1999
			EP	1100527 A2	23-05-2001
			WO	9962535 A2	09-12-1999
			US	6399078 B1	04-06-2002
US 2003148947	A1	07-08-2003	US	2002055142 A1	09-05-2002
			AU	1784201 A	04-06-2001
			CA	2392366 A1	31-05-2001
			EP	1233777 A1	28-08-2002
			JP	2004500057 T	08-01-2004
			WO	0137857 A1	31-05-2001

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